CLAIMS

I claim:

1. A logical port configuration system, the system comprising:

a server computing element; and

a client computing element communicatively coupled to the server computing element, the client computing element configured to initiate a test, whereupon the server computing element communicatively interacts with the client computing element to discover a port status of a first port of the client computing element, the first port of the client computing element being associated with an application program operative on the client computing element.

2. The system of claim 1, further comprising the server computing element configured to receive a test initiation command that is transmitted by the client computing element using a first Internet Protocol socket.

3. The system of claim 2, further comprising the client computing element communicatively interacting with the server computing element using at least one of a query message, an acknowledgement message, and a time-out message to discover the port status of the first port of the client computing element.

4. The system of claim 3, wherein the test further comprises discovering a port status of a second port of the client computing element, the second port of the client computing element being associated with the application program operative on the client computing element.

5. The system of claim 4, wherein the first port is a uni-directional port of the client computing element and the second port is a bi-directional port of the client computing element.

6. The system of claim 5, wherein the client computing element generates a status report comprising the status of the first and second ports of the client computing element.

7. The system of claim 6, wherein the status report further comprises instructions to a user to configure the first port of the client computing element to enable the client computing element to communicatively couple to a remote client computing element when using the application program.

8. The system of claim 7, wherein the client computing element communicates with the server computing element through a router.

9. The system of claim 8, wherein the status report further comprises instructions to a user to configure the router.

10. The system of claim 9, wherein the client computing element communicates with the router to obtain operating information of the router.

11. The system of claim 7, wherein the application program is an audio-video chat program.

12. The system of claim 11, wherein the audio-video chat program is a video chat program.

13. The system of claim 1, wherein the client computing element further contains a database comprising a port information of a plurality of ports, for operating the application program.

14. The system of claim 13, wherein the port information comprises a plurality of port identifiers and a plurality of network transport protocols operative on the plurality of ports.

15. The system of claim 14, wherein the plurality of transport protocols includes a transport control protocol (TCP) and a user datagram protocol (UDP).

16. The system of claim 14, wherein the application program uses a transport control protocol (TCP) on the first port of the client computing element and a user datagram protocol (UDP) on a second port of the client computing element.

17. A logical port configuration program stored on a computer-readable medium, the program comprising:

a first computer-readable code contained in a first client computing element; and

a second computer-readable code contained in a server computing element, the first and second computer readable codes operative to performing a communication test between the first client computing element and the server computing element to discover the status of at least one port of the first client computing element, wherein the at least one port is used in an application program operative to providing communication between the first client computing element and a second client computing element.

18. The program of claim 17, wherein the communication test is used to discover the status of a first and a second port of the first client computing element, and wherein communication through the first port is carried out using transport control protocol (TCP) and communication through the second port is carried out using user datagram protocol (UDP).

19. A method for configuring a logical port, the method comprising:

transmitting on a first logical port, a message requesting a test of a second logical port;

receiving an acknowledgement message on the first logical port; and

compiling a configuration result based on at least one of a receipt of a test message through the second logical port, and a timeout period during which the test message is not received through the second logical port.

20. The method of claim 19, wherein the second logical port is operative in running a first software application program.

21. The method of claim 19, wherein the second logical port is one of a plurality of ports that are required to run a first software application program.

22. The method of claim 21, wherein the first software application program is at least one of an instant messaging, a video chat, and an audio-video communication program.

23. A software wizard program stored on a computer-readable medium, the program comprising:

logic configured to provide instructions to a user for initiating a test program that tests a logical port for use in a first software application program;

logic configured to provide a test result comprising a port status of the logical port; and

logic configured to provide instructions to the user for configuring the logical port when the port status is a failed status.